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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/532,398	03/22/2000	Paul A. Boerger	10991888-1	8092

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FERRIS III, FRED O

ART UNIT	PAPER NUMBER
2123	2

DATE MAILED: 08/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/532,398	BOERGER ET AL.
	Examiner Fred Ferris	Art Unit 2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 March 2000.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-29 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 March 2000 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
- 1.) Certified copies of the priority documents have been received.
- 2.) Certified copies of the priority documents have been received in Application No. _____.
- 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

1. *Claims 1-29 have been presented for examination. Claims 1-29 are rejected by the examiner.*

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. ***Claims 1-29 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-15 of copending Application No. 09/532696.***

This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: Claims 1-29 of the present invention contain limitations relating to the model and the modeling of an illumination

source that are not distinguishable from the illumination source modeling limitations included in claims 1-15 of application 09/532696.

*Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.*

Claim Interpretation

3. *The examiner accepts that techniques relating to image capture systems are well known in the art and have not been specifically disclosed in applicant's specification. Accordingly, the recitations contained in the preamble of independent claims 1 and 23, and in dependent claims 2-7, and 24-29 relating to "an image capture device" are interpreted by the examiner as intended use of the claimed invention.*

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. ***Claims 1-2, 7-11, 13, 20, 23, 24,26, and 29 are rejected under 35***

U.S.C. 102(a) as being clearly anticipated by U.S. Patent 6,486,945 issued to Haerle et al.

Haerle discloses an optical monitoring device that includes light emitting diodes (illumination source) controlled by a circuit (central unit) that models the operation and provides a changing adjustment to the light source in response to the modeling circuit.

For example, at column 3, line 53 Haerle recites:

"The control of the circuit devices S1 and S2 as well as SP1 to SP(n) is effected here from the central unit 10 which includes a current source 10' which also measures the voltages U1, U2 and U3. As a particularly preferred further development, the exists of controllably driving the current source 10' so that the current flowing through the active transmitting diode D(n)2 is adjusted. In this process, however, not only is the current automatically controlled to a constant value but also adjusted according to the measured light output."

Haerle further discloses a controlling the on – off times and current flow to the illumination source. (See Fig. 1) At column 3, line 25 Haerle recites:

"Thus, circuit device S2 is closed and therefore current can flow from the current source 10' of the central unit 10 via S2 to the diode D(n)2 and via this to and through the closed circuit device SP(n) and the resistor R3 to ground."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. *Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,065,007 issued to Tanaka in view of U.S. Patent 5,471,052 issued to Ryczek.*

Regarding independent claims 1, 8, 16 and 23: Tanaka discloses an apparatus for measuring the amount of light output from a light emitting diode (LED) that incorporates a light receiving device and a light measuring circuit. (Abstract, Summary of Invention, CL3-L7-65, CL4-L5-26, Figs. 1-3)

Tanaka does not explicitly disclose a light output measuring model that adjusts the light based on changes at the illumination source.

Ryczek discloses a microprocessor controlled light output measuring apparatus (and model) that makes corrections (adjustments) to the LED current based on measured light output. Pashley also discloses an ambient temperature sensor as an input to the model and applying adjustments (compensation) to the illumination device based on temperature. (Abstract, Summary of Invention, CL2-L4-40, CL4-L1-30, CL5-L12-65, CL6-L1-20, 50-61, CL8-L43-65, Figs. 1, 2, 5-7)

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of Tanaka relating to an apparatus for measuring the amount of light output from a light emitting diode (LED) that incorporates a light receiving device and a light measuring circuit, with the teachings of Ryczek relating to a model that makes corrections (adjustments) based on both

measured light output and measured temperature. An obvious motivation exists since, as referenced in the prior art, the limitations in light measurement output accuracy is relative to the models ability to compensate for ambient temperature. (see Ryczech CL1-L55) Accordingly, a skilled artisan would have been motivated to include compensation (adjustments) for ambient temperature in the measured light output model in order to improve the accuracy of the light output measurement.

Regarding dependent claims 2-7, 9-15, 17-22, and 24-29: As cited above, Ryczech discloses microprocessor controlled light output measuring model that incorporates an ambient temperature sensor. In addition, the Ryczech reference discloses pulse width modulation (controlling on-off times) of illumination sources (LED's), a hardware model (circuit) incorporating resistor/capacitor/inductors, and computer program code (inherent in microprocessor). (Abstract, Summary of Invention, CL2-L4-40, CL4-L1-30, CL5-L12-65, CL6-L1-20, 50-61, CL8-L43-65, Figs. 1, 2, 5-7)

Conclusion

6. *The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, careful consideration should be given prior to applicant's response to this Office Action.*

U.S. Patent 6,087,846 issued to Alvord et al teaches LED light output testing and measuring.

PCT WO 01/27910 A1 issued to Silvestre teaches illumination measuring.

U.S. Patent 6,127,783 issued to Pashley et al teaches LED illumination detection.

Art Unit: 2123

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 703-305-9670 and whose normal working hours are 8:30am to 5:00pm Monday to Friday.

Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 703-305-3900.

The Official Fax Numbers are:

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